REMARKS

In an Office Action mailed on July 27, 2005, the Examiner: (1) objected to the drawings; (2) rejected claims 1 and 14 under 35 U.S.C. § 101 for failure to claim statutory subject matter; (3) rejected claims 1, 14, 15, 22, and 29 under 35 U.S.C. § 103(a) as being obvious over a combination of Burks (U.S. Pat. No. 5,946,475) and Bryant (*CMOS Circuit Verification With Symbolic Switch-Level Timing Simulation*," IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 20, No. 3, March 2001); and (4) rejected claims 2-13, 16-21, 23-28, and 30-33 under 35 U.S.C. § 103(a) as being obvious over a combination of Burks and Bryant and further in view of Parashkevov (EP Application No. 1 083 500 A2).

Regarding the objection to the drawings, Applicants attach a replacement sheet corresponding to Figure 1. The replacement sheet for Figure 1 includes the correct form of the G_{before} function. No new matter has been added. The correct form of the G_{before} function appears on page 6, line 6 of the Specification.

Concerning the rejection of claims 1 and 14 under 35 U.S.C. § 101 for failure to claim statutory subject matter, although Applicants believe that these claims recite statutory subject matter, Applicants have amended these claims to expedite the prosecution of this application, and accordingly request the Examiner to withdraw the rejection of these claims. In particular, claim 1 now recites "using a switching vector generator, determining the switching vector ... ." Thus, amended claim 1 is directed to technological arts and produces a concrete, useful, and tangible result. Claim 14 now recites "using a switching vector generator, determining the set of switching vectors ... ." Thus, amended claim 14 is also directed to technological arts and produces a concrete, useful, and tangible result. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1 and 14 under 35 U.S.C. § 101.

Regarding the rejection of claims 1, 14, 15, 22, and 29 under 35 U.S.C. § 103(a) as being obvious over a combination of Burks and Bryant, Applicants have amended independent claims 1, 14, 22, and 29. Applicants respectfully submit that, as amended, these claims are not obvious over the combination of Burks and Bryant for at least the following reasons. The Examiner cites

to column 9, lines 30-36 of <u>Burks</u> to conclude that <u>Burks</u> teaches generating a before transition function and an after transition function corresponding to the predetermined input transition and the predetermined output transition. (July 27, 2005 Office Action, page 7, subsection 7.1.1.). Applicants respectfully disagree with the Examiner's characterization of the teachings of <u>Burks</u>. In the cited portion of <u>Burks</u>, <u>Burks</u> teaches that in determining appropriate values for component inputs one may use a signal assignment which satisfies a particular exemplary equation. (col. 9, ll. 27-32). <u>Burks</u> further mentions in the cited portion that this is an instance of a problem known as Boolean satisfiability, which has been known to be NP-hard. (col. 9, ll. 33-36). The cited portion of <u>Burks</u>, however, does not teach or suggest generating a before transition function and an after transition function corresponding to the predetermined input transition and the predetermined output transition.

None of the other cited references teaches or suggests generating a before transition function and an after transition function corresponding to the predetermined input transition and the predetermined output transition. Thus, they fail to cure the deficiency of teachings of <u>Burks</u>. Thus, taken alone or in combination, the cited references fail to teach or suggest the subject matter recited in independent claims 1, 14, 22, and 29. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a).

Claims 2-13 depend, directly or indirectly, from claim 1, and are thus patentable for at least the reasons given above with respect to claim 1.

Claims 15-21 depend, directly or indirectly, from claim 14, and are thus patentable for at least the reasons given above with respect to claim 14.

Claims 23-28 depend, directly or indirectly, from claim 22, and are thus patentable for at least the reasons given above with respect to claim 22.

Claims 30-33 depend, directly or indirectly, from claim 29, and are thus patentable for at least the reasons given above with respect to claim 29.

Accordingly, Applicants request allowance of pending claims 1-33 over the cited references. Should issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at (512) 996-6839.

The Office Action contains number of other statements characterizing the scope of claims and the cited references. Regardless of whether these statements are addressed by Applicants in this Response, Applicants respectfully refuse to subscribe to these statements.
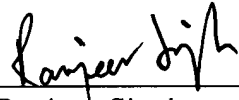
If Applicants have overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079, Freescale Semiconductor, Inc.

Respectfully submitted,

SEND CORRESPONDENCE TO:

By: _____

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